

AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121, the following listing of claims will replace all prior versions, and listings, of claims in the application, including those amendments submitted in the September 22, 2011 Response to Office Action:

1 (Currently Amended) A cemented carbide material for a surface coated gear cutting tool which wherein the cemented carbide material is employed in as a substrate for a the surface coated gear cutting tool obtained by forming a hard-coated layer on a surface of said substrate,

said cemented carbide material for a surface coated gear cutting tool comprising a WC-βt-Co based cemented carbide[[,]];

wherein said WC-βt-Co based cemented carbide comprises: WC; a βt solid solution; and Co,

wherein said WC and said βt solid solution form a hard phase, and said Co forms a binder phase,

wherein [[a]] the content of said Co forming a binder phase of said cemented carbide material for a surface coated gear cutting tool is in a range of 12 to 17 wt%, and;

wherein said βt solid solution comprises: WC, TiC, TiN and either one or both of Ta carbonitride and Nb carbonitride;

wherein among the components of a said βt solid solution forming a hard phase of said cemented carbide material for a surface coated gear cutting tool, [[a]] the content of the components excluding said WC [[is]] are in [[a]] the range of 15 to 20 wt%, and [[a]] the total content of said Ta carbonitride and said Nb carbonitride is in a range of 5 to 7 wt%[[,]];

wherein said βt solid solution comprises: TiC; TiN; Ta carbonitride; and Nb carbonitride, and

wherein a Nb content D_{Nb} and a Ta content D_{Ta} in said βt solid solution satisfy a relational expression of D_{Nb}/(D_{Nb}+D_{Ta}) ≥ 0.7[[,]]; and

wherein said cemented carbide material is employed as a substrate for a surface coated gear cutting tool obtained by forming a metal carbonitride hard coat layer on a surface of said substrate

wherein said cemented carbide material has been manufactured by sintering a green compact of starting material powders in a nitrogen atmosphere.

2 (Previously Cancelled).

3 (Currently Amended). A-The cemented carbide material for a surface coated gear cutting tool according to claim 1, wherein a fracture toughness at room temperature is in a range of 9.5 to 13 MPa(m)^{1/2}.

4 (Currently Amended). A surface coated gear cutting tool comprising ~~a~~the cemented carbide material for ~~a~~a surface coated gear cutting ~~tools~~tool according to claim 1.

5-8. (Canceled)